

ABSTRACT

This invention provides a capless retractable writing tool applicable to neutral and volatile writing fluids and capable of self sealing and substantially preventing vapor fluid from evaporating through the valve when the tip is in the retracted position. The valve includes a front end and a back end, where the front end is adapted to open to allow the writing tip to extend there through. The front end of the valve may have a concave shape profile with a slit. To assist in closure of the slit and to increase the amount of vapor pressure the slit can withstand, a tension device may be provided around the front end to substantially seal the slit when the tip is within the valve. The back end of the seal has a hole adapted to seal around a cartridge that the tip is attached to. When the writing tool is in the retracted position, the tip is between the front and back ends to substantially seal the tip from the outside air and prevent the release of vapor fluid from within the valve. The valve may be fabricated of a material that is impermeable to air and vapor fluid.